

# **Indian River Lagoon Surface Water Improvement and Management Plan**

## **Restoration Plan Database: Crystal Reports of Individual Plan Summaries**

### **I. BASIC PLAN DATA**

**Plan name:**

Indian River Lagoon Surface Water Improvement and Management Plan

**Brief description of plan:**

The Surface Water Improvement and Management (SWIM) Act designated the Indian River Lagoon system as a priority water body in Florida for restoration and special protection. Since the lagoon system overlaps the St. Johns River Water Management District and the South Florida Water Management District, both Districts were directed to develop a management plan for this water body. The major categories of issues that have been identified and addressed in this plan are water and sediment quality, habitat alteration and loss, and interagency management. Goals are set forth, with five specific programs to achieve them. The SWIM plan identifies problem areas in the Indian River Lagoon region from Mosquito Lagoon south to the St. Lucie watershed on the eastern coast of Florida.

**Region the plan is located within:**

South-Atlantic Region

**Watershed(s) included within the plan:**

S190x

**Area plan covers (in square miles):**

square miles

**Plan scale:**

Multi-county

**Plan's lead organization(s):**

South Florida Water Management District, St. Johns River Water Management District

**Plan's Main Contact Information:**

Troy Rice  
Director  
St. Johns River Water Management District  
Indian River Lagoon Program  
525 Community College Pkwy. SE  
Palm Bay, Florida 32909  
407-984-4950  
407-984-4937  
sjr.state.fl.us

**On-line version of plan:**

**Date of original plan:**

9/1989

**Date of plan update:**

9/1994

## **II. TECHNICAL INFORMATION**

**Plan includes restoration goals:** Y

**Level of detail of the goals:**

G

**Summary of the goals:**

1. To attain and maintain water and sediment of sufficient quality to support a healthy, macrophyte-based, estuarine lagoon system. 2. To attain and maintain a functioning macrophyte-based ecosystem which supports endangered and threatened species, fisheries and wildlife. 3. To achieve heightened public awareness and coordinated interagency management of the Indian River Lagoon ecosystem that results in the accomplishment of the aforementioned goals. Habitat Preservation and Restoration Program; A. Preserve and maintain existing seagrass beds, B. Restore lost seagrass beds, C. Create new seagrass beds, D. Restore function of impounded marshes, E. Preserve existing marshes, F. Create new marshes

**Plan recommends or uses criteria for selecting restoration sites (e.g. cost benefit ratio, ecological benefits):**

Y

**Summary of the criteria:**

1.State-mandated projects and linkage to SWIM Plan goals, issues and objectives; 2.Restorative and protective action versus study; 3.Ecological, engineering or economical feasibility; 4.Ability to diagnose real or perceived problems and test feasibility of solutions; 5.Ability to monitor success and show measurable improvements; 6.Urgency to correct the condition; 7.Extent to which any issue is addressed by other plans or agencies; opportunities to coordinate with any non-SWIM programs; Relationship to the reconnaissance and level II reports on the Indian River Lagoon; 1.Priorities of the SJRWMD and SFWMD governing boards; 2.Cost-sharing opportunities with local governments

**Plan recommends restoration of specific project sites:**

Y

**Plan includes a discussion of funding sources:**

Y

**Plan addresses long-term protection of restored sites:**

Y

**Partners included in developing the plan:**

Federal  
State  
Local  
Business/Industry  
Non-profit Organizations  
Academia  
Foundations  
Private landowners

**Type(s) of public outreach included during plan development:**

Held public workshops, meetings, open house, or scoping meetings  
Held focus groups  
Formed an advisory group(s)  
Was subject to a public comment period

**Plan includes public outreach as part of plan implementation (e.g. annual public meeting, local group participation):**

Y

**Plan discusses the application of innovative approaches to restoration:**

N

**Plan make use of GIS mapping capabilities:**

N

**Plan addresses monitoring/reference sites for ecosystem level monitoring (baseline conditions) by:**

G

**Plan addresses monitoring/reference sites for project level monitoring by:**

G

**The plan discusses or coordinates with other restoration plans covering the same geographic area:**

Y

**Other plan names:**

In addition to SWIM plans, these efforts include 1. district-wide water management plans, 2. basin plans and 3. in the SFWMD, regional water supply plans.

District Water Management Plans (DWMPs) are the water management districts' studies and programs as well as new initiatives. SWIM plans and their associated projects will be a major source of input for the surface water related sections of the DWMP. For example, the impoundment of salt marshes and their isolation from the Indian River Lagoon, an issue identified in this SWIM Plan Update, fits into the DWMP as a restoration issue for the natural systems section. The discussion of options for rehabilitation and management of these impoundments will be used in DWMP. The objectives concerning marsh rehabilitation could become benchmarks for monitoring the success of scheduled tasks in the DWMP. This SWIM plan also coordinates with the Indian River National Estuary Program CCMP.

**Plan contains detailed information on historic and/or current habitat size, rate of loss, acres restored or protected, etc.):**

Y

**Summary of this habitat information:**

Currently, there are over 90,000 lagoon acres covered with seagrasses. Since the 1950's, the Indian River Lagoon system has lost, through destruction and impoundment, over 75% of its emergent wetlands. While many impoundments of the high salt marsh and mangrove communities have furnished needed mosquito control, they have also isolated the vast majority of the marsh and mangrove community from the lagoon. Seagrass beds are another critical component of the Indian River Lagoon and play an important role in biological productivity and diversity. Documented losses range from 100% to 25% at specific study sites within the lagoon. Some seagrass beds appear to be threatened by adverse water quality conditions (e.g., turbidity and nutrient overload).